

ABSTRACT OF THE DISCLOSURE

A variable camshaft timing system having a camshaft with a vane-type rotor, where oscillation of the housing relative to the vane is actuated by pressurized engine oil, derived in part from a torque pulse in the camshaft. An annular locking plate is positioned coaxially with the camshaft and the housing. It is moveable relative to the housing along the longitudinal central axis of the camshaft between two positions, the teeth on the locking plate engaging the teeth on the housing and where the teeth on the locking plate are disengaged from the teeth on the housing, each position preventing circumferential movement of the housing relative to the rotor. The locking plate is biased by a plurality of metallic straps towards engagement of the teeth on locking plate with the teeth on the housing. The straps have one end secured to the locking plate and another end secured to the rotor.